112 年奇美醫院胸腔內科臨床病例討論會

日期：中華民國 112 年 09 月 19 日(星期二)

時間及地點：16:00-17:00

課程活動題目：**Pericaridal cyst in CXR**

主講人：謝俊民主任

主辦單位：奇美醫院胸腔內科

課程地點：10 樓討論室

教育積分：台灣胸腔暨重症加護醫學會

參加對象：主辦單位所屬院內醫師

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摘要:

Pericardial cysts are anomalous outpouchings of parietal pericardium. Rarely there is any visible communication between the pericardial space and the cystic space. Eighty-percent are unilocular, and 20% are multilocular. They usually are located anteriorily, abutting the anterior chest wall, at the cardiophrenic angles. AFIP series of 42 cases showed ratio between right and left cardiophrenic angles of 4:3.

Radiographically, they appear as smooth, round or oval, well-defined masses in contact with the heart and the anterior chest wall. Rarely they calcify. On CT they exhibit the characteristics of a cyst, with water or soft tissue attenuation.

They are, for the most part, asymptomatic. In surgical series of pericardiac cysts, 33% show symptoms of chest pain, cough, and/or dyspnea. The vast majority of these pericardial cysts do not require excision. Surgical excision is only required for cases where the differentiation between the diagnosis of a cyst or some malignant disease is needed. Serial radiographic examination to monitor growth would be all that is required.

A pericardial cyst is a congenital or acquired outpouching of parietal pericardium. They do not actually communicate with the pericardial cavity. (Pericardial diverticula communicate with the pericardial cavity). On chest radiographs, pericardial cysts appear as round, smooth densities usually within the right cardiophrenic angle abutting both the anterior chest wall and anterior aspect of the right hemidiaphragm. However, they can be found within the left cardiophrenic angle. Rarely they can be located well above the diaphragm, even within the superior mediastinum. There are case reports of pericardial cysts causing obstruction of the right middle lobe bronchus.

The cysts appear on computed tomography as smooth, low-attenuation (usually water-attenuation, occasionally higher if infected), unilocular lesions. They rarely have calcification.

The majority of patients with pericardial cysts are asymptomatic. However, the cysts can cause or be associated with chest pain (most commonly), dyspnea, persistent cough, or even paroxysmal atrial tachycardia. Symptom relief with complete excision is variable.

Pericardial cysts result from anomalous outpouchings of the parietal pericardium. In rare cases, visible communication with the pericardial sac is demonstrated. A pericardial cyst is to be distinguished from a pericardial diverticulum, which is an anomaly of the visceral pericardium and may, therefore, rapidly change in size (usually decrease in size) since it communicates with the pericardial sac.

Pericardial cysts are most commonly located anteriorly within the thorax and to the right of midline (i.e., in the right cardiophrenic angle region), often abutting the chest wall and diaphragm. Radiographically, they appear as well-circumscribed round or oval masses which partially silhouette the cardiac silhouette (i.e., which are in contact with the heart). On CT, they are seen to have attenuation similar to that of water, although they may also be in the soft tissue attenuation range if they contain hemorrhage or are infected.

Most pericardial cysts are asymptomatic and are identified incidentally on imaging studies; however, in up to one-third of patients, they may be symptomatic and present with nonspecific signs and symptoms to include chest pain, cough, or dyspnea.

Surgical excision of the pericardial cyst is considered in cases in which the patient is symptomatic, or when a malignant etiology is in the differential and cannot be excluded with reasonable certainty via imaging.

Pericardial cysts are congenital cysts that do not communicate with the pericardial space. They are usually asymptomatic and are often not detected until adulthood. Most common sites include the right cardiophrenic angle (60-70%), followed by the left side (20-30%). About 10% of lesions occur in other sites and can mimic a foregut duplication cyst.

Pericardial cysts are the result of an outpouching of the parietal pericardium that does not communicate with the pericardial sac. Those that do communicate are referred to as pericardial diverticuli. They are usually unilocular and smooth without a pedicle. They usually contain transudative fluid (Hounsfeld units less than 10) and are less than 3 cm in diameter. They are typically located in the right cardiophrenic angle but can be found in other locations. They are usually clinically silent, but can be associated with pain, dyspnea, and cough. They are often difficult to distinguish between bronchogenic cysts due to their location or extension into other areas of the pericardium.

Case 47 y/o male with 2 week history of congestion.

Image Findings

Chest Radiograph: Well defined, oval shaped mass at the left lung base adjacent to the cardiac apex

Chest CT: Well-circumscribed, homogeneous mass with near-water attenuation in the anterior mediastinum

Differential Diagnosis

Pericardial cyst

Bronchogenic cyst

Pericardial fat pad

Morgagni hernia

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